NCI Director's Report

Norman E. Sharpless, M.D.

1st Virtual Joint Meeting of NCI Board of Scientific Advisors & National Cancer Advisory Board

April 9, 2020

@NCIDirector @TheNCI



Today's Meeting

Deputy Director's Report – Dr. Doug Lowy

Update: NYU Coronavirus Activity – Dr. Dafna Bar-Sagi

Clinical Trial Policies – Dr. James Doroshow

Closed Session: Discussion of Research Efforts – Dr. Dinah Singer



NCI & COVID-19

- Today's discussion is focused on SARS-CoV-2 and COVID-19
- We will discuss the impact of the pandemic on NCI and the extramural community.
- COVID-19 has affected everything we do at NCI. We've adapted how we do business, and we're embracing opportunities to contribute to COVID research.
- Cancer research and cancer care remain JOB #1 at NCI.
- Even during these difficult times, we are still making progress toward our mission of reducing cancer suffering

NCI & COVID-19

Intramural Research Program

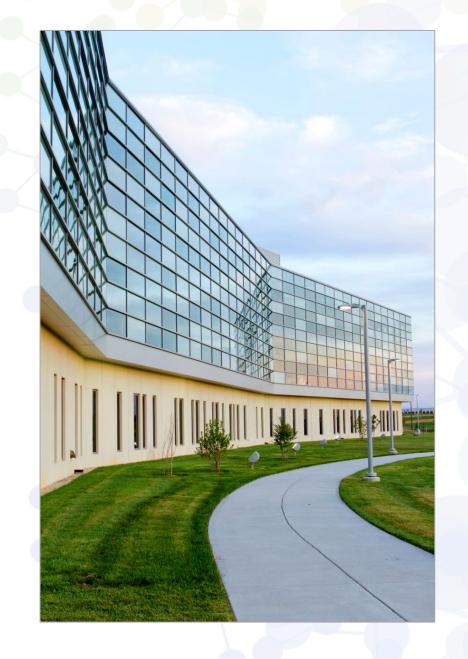
Leaders in virology research

Lowy, Schiller, Varmus, Gallo, Broder

Frederick National Laboratory for Cancer Research

- Facilities: CryoEM, Serology, more
- Unique contracting authorities
- Robust collaborative relationships

Grantee Institutions and Networks diverse skills and powerful technology



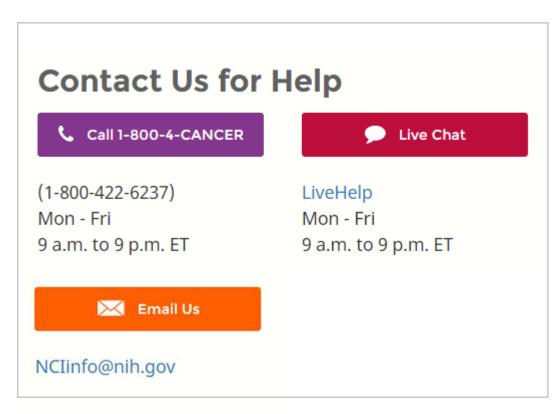
NCI Operations: Telework, *Minimal Maintenance*, Critical Clinical Care

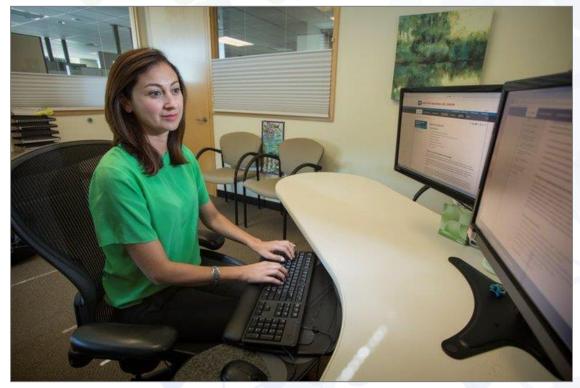




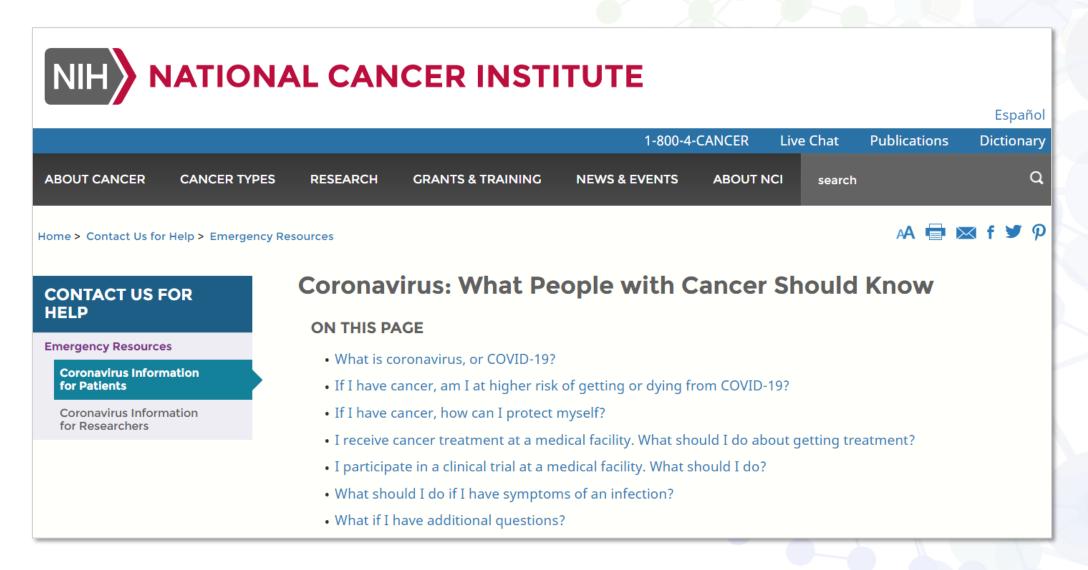


Cancer Information Service | 1-800-4-CANCER





Information for people with cancer



Information for Grantees



- grants.nih.gov
- grantspolicy@nih.gov
- cancer.gov/coronavirus
 -researchers

NCI Bottom Line

Cancer Research Training in the Era of COVID-19

CORONAVIRUS DISEASE 2019 (COVID-19)

Information for Applicants and Recipients

r Bogler

director of the Center for Cancer Training (CCT), Dr. Oliver Bogler, discusses the challenges andemic is taking on the cancer research training community, and advises trainees on how to pir portfolio and networks. If you are a research mentor reading this, please share this blog with



NIH Guidance for Grantees

- Extended deadlines for applications, no justification required
- Use of NIH grant funds for salaries and stipends
- Flexibility regarding project extensions and accommodating unanticipated costs
- Extensions of post-award reporting requirements
- Numerous flexibilities regarding expenditures of funds
- Extensions for early stage investigator eligibility due to COVID-19related disruptions will be considered
- NIH will be flexible with extending time constraints for fellowship,
 career development, and training awards, including phased awards

Leadership Update



Daniel Gallahan, Ph.D.

Director, Division of Cancer Biology

House Appropriations Labor-HHS Subcommittee Hearing FY 2021 NIH Budget Request - March 4, 2020

- Participated alongside Dr. Collins, and IC Directors from NIAID, NHLBI, NIDA, and NICHD
- 8 questions including from the Chair and Ranking Member
- Topics included NCI's increase in applications,
 CCDI update, clinical trials, and kidney cancer
- Senate budget hearing postponed indefinitely as Congress determines next steps in Appropriations process during COVID-19



Legislative Updates: Three Aid Packages to Address COVID-19

Phase 1 (March 3rd)

 \$8.3B in funding for health agencies – vaccine development and testing, plus small business loan subsidies (\$2.2B to CDC, \$836M to NIAID & NIEHS)

Phase 2 (March 18th)

• \$100B in tax credits for employers offering paid sick leave, increases to unemployment benefits, and food assistance

Phase 3: CARES Act (March 27th)

- Largest stimulus in U.S. history \$2 trillion in loans and support for industry and small business
- \$130B in aid for hospitals, doctors, nurses, and health centers
- \$4.3B to CDC, \$945.5M to NIH (NIAID, NHLBI, NIBIB, NCATS, NLM, NIH OD), \$80M to FDA
- Telehealth flexibilities, coverage of diagnostics and preventive services for COVID-19
- Direct payments to individuals, unemployment benefits, student loan deferral, election adjustments

Progress in Cancer Research

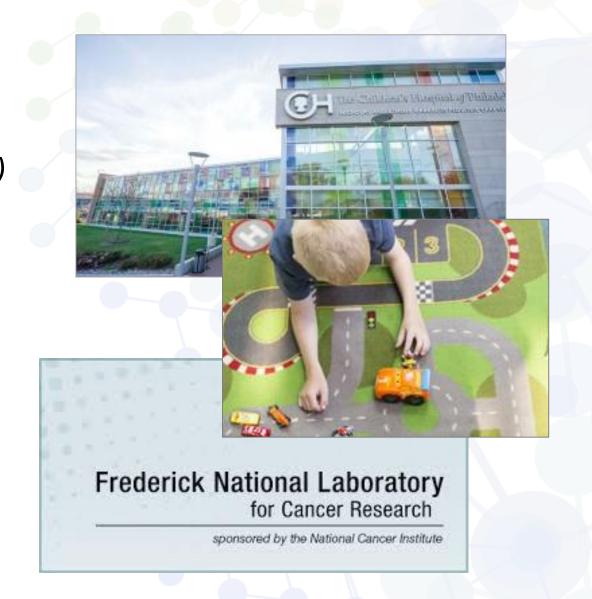
CD33 CAR T Trial

Study of Anti-CD33 Chimeric Antigen Receptor-Expressing T Cells (CD33CART) in Children and Young Adults With Relapsed/Refractory Acute Myeloid Leukemia

ClinicalTrials.gov Identifier: NCT03971799

Principal Investigators:

- Nirali Shah, MD, MHSc, NCI
- Richard Aplenc, MD, PhD, Children's Hospital of Philadelphia



Steps per day and all-cause mortality

NCI Press Release

Higher daily step count linked with lower allcause mortality

Posted: March 24, 2020 Contact: NCI Press Office

240-760-6600

In a new study, higher dail associated with lower mor causes. The research team investigators from the Nat (NCI) and the National Ins both parts of the National well as from the Centers for Prevention (CDC), also fou steps a person takes each intensity of stepping, had with mortality.

JAMA | Original Investigation

Association of Daily Step Count and Step Intensity With Mortality Among US Adults

Pedro F. Saint-Maurice, PhD; Richard P. Troiano, PhD; David R. Bassett Jr, PhD; Barry I. Graubard, PhD; Susan A. Carlson, PhD; Eric J. Shiroma, ScD; Janet E. Fulton, PhD; Charles E. Matthews, PhD

The findings were published March 24, 2020, in the *Journal of the American Medical Association*.

Selumetinib & NF1

In NIH trial, selumetinib shrinks tumors, provides clinical benefit for children with NF1

Posted: March 18, 2020

Contact: NCI Press Office

240-760-6600

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Selumetinib in Children with Inoperable Plexiform Neurofibromas

A.M. Gross, P.L. Wolters, E. Dombi, A. Baldwin, P. Whitcomb, M.J. Fisher, B. Weiss, A.R. Kim, M. Bornhorst, A.C. Shah, S. Martin, M.C. Roderick, D.C. Pichard, A. Carbonell, S.M. Paul, J. Therrien, O. Kapustina, K. Heisey, D.W. Clapp, C. Zhang, C.J. Peer, W.D. Figg, M. Smith, J. Glod, J.O. Blakeley, S.M. Steinberg, D.J. Venzon, L.A. Doyle, and B.C. Widemann al trial show that
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intramural
Cancer Research
nstitute (NCI), part

Dr. Brigitte Widemann with Travis Carpenter, who received selumetinib for NF1 at NIH. Credit: National Cancer Institute



of the National Institutes of Health. Results of the trial were published March 18, 2020, in the *New England Journal of Medicine*.



Metabolism & metastasis

Home > News & Events > Cancer Currents Blog

Changes in Metabolism Help Melanomas Spread

nature

Article | Published: 18 December 2019

Metabolic heterogeneity confers differences in melanoma metastatic potential

Alpaslan Tasdogan, Brandon Faubert, Vijayashree Ramesh, Jessalyn M. Ubellacker, Bo Shen, Ashley Solmonson, Malea M. Murphy, Zhimin Gu, Wen Gu, Misty Martin, Stacy Y. Kasitinon, Travis Vandergriff, Thomas P. Mathews, Zhiyu Zhao, Dirk Schadendorf, Ralph J. DeBerardinis 2 & Sean J. Morrison 2

skin cancer, can be treated it's caught early. But once te of the tumor to other e highly lethal.

provide important insights ore likely to spread, or searchers showed that metastasize if they ter protein called MCT1.

ibility to take up an te, which increases their s. This altered metabolism, elanoma cells survive as to form secondary tumors



PET/CT scan of a patient with metastatic melanoma.

Credit: J Transl Med. March 2008. https://doi.org/10.1186/1479-5876-6-12. CC BY 4.0.

Discussion